<u>In the Claims</u>:

1. (original) A photodetector arrangement (1) for stray light compensation with a photodetector unit (2) for detecting and determining at least two measuring signals (S_1 and S_2) and with a differential unit (6) for subtraction of the measuring signals (S_1 and S_2), wherein between the photodetector unit (2) and the differential unit (6) a compensation unit (4) is provided for compensating the constant components (S_{GL}, S_{mGL}) forming the basis of the respective measuring signal (S_1 and S_2).

2. (original) A photodetector arrangement according to claim 1, wherein the compensation unit (4) comprises a number of differential modules (10) which corresponds to the number of measuring signals (S_1 and S_2).

Claims **3 to 8** (canceled).

9. (original) A method for stray light compensation of measuring signals (S_1, S_2) detected by means of a photodetector unit (2), wherein a constant component (S_{GL}, S_{mGL}) forming the basis of the respective measuring signal (S_1, S_2) is compensated before subtraction of the measuring signals (S_1, S_2).

1   **10.**   (original) A method according to claim 9, wherein for the

2   measuring signals (S_1, S_2) a constant component (S_{GL}, S_{mGL}) is

3   determined, which commonly represents these signals.

Claims **11 to 13** (canceled).

1   **14.**   (new) A photodetector arrangement according to claim 1,

2   wherein the compensation unit (4) comprises an amplifier

3   unit (8).

1   **15.**   (new) A photodetector arrangement according to claim 14,

2   wherein an amplifier unit (8) common for all measuring

3   signals (S_1 and S_2) is provided.

1   **16.**   (new) A photodetector arrangement according to claim 14,

2   wherein a number of amplifier units (8) is provided, which

3   corresponds to the number of the detected measuring signals

4   (S_1 and S_2).

1   **17.**   (new) A photodetector arrangement according to claim 1,

2   wherein the compensation unit (4) comprises a limit value

3   module (12).

1   **18.**   (new) A photodetector arrangement according to claim 1,

2   wherein photodetector unit (2) is embodied as a photonic

3   mixer detector (14).

1   **19.**   (new) A photodetector arrangement according to claim 1,

2   wherein the photodetector unit (2) is embodied as an active

           pixel sensor.

1   **20.**   (new) A method according to claim 9, wherein for the

2   constant component (S_{GL}, S_{mGL}) at least one constant factor

3   is determined.

1   **21.**   (new) A method according to claim 9, wherein the constant

2   component (S_{GL}, S_{mGL}) is determined as a function of one of

3   the measuring signals (S_1, S_2).

1   **22.**   (new) A method according to claim 9, wherein the constant

2   component (S_{GL}, S_{mGL}) is determined at least by means of a

3   mean maximum modulation contrast.

[REMARKS FOLLOW ON NEXT PAGE]